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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,932	01/16/2002	Peter Hagerlid	14256	2854

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DORSEY & WHITNEY LLP
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MINNEAPOLIS, MN 55402-1498

EXAMINER

GORDON, BRIAN R

ART UNIT	PAPER NUMBER
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1797

MAIL DATE	DELIVERY MODE
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10/18/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/936,932

Applicant(s)

HAGERLID ET AL.

Examiner

Brian R. Gordon

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7-23-07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3,16,18,20-23 and 25-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,3,16,18,20-23 and 25-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 2-3, 16, 18, 20-23, and 25-31 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 18, 23, 25, and 29-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Karg et al. US 6,706,538.

Karg et al. disclose a device and method for independently dispensing a metered amount of a plurality of liquids into an array of LRUs. The method includes: (a) providing an array of isolated, sealed, tapped reservoir units, the array of reservoir units including a reservoir for each LRU, each reservoir unit containing an integrated metering tap; (b) aligning the array of reservoir/tap units with the array of LRUs so that each tap is aligned with one LRU; and (c) actuating one or more taps in the array of reservoir units so that each actuated tap dispenses a metered amount of liquid into the LRU aligned with that tap. The metered amount dispensed into any particular unit in the array can be from zero nanoliters to 20 microliters, preferably from 20 nanoliters to 2 microliters, e.g., 50 nanoliters to 500 nanoliters (abstract).

An in-line nozzle embodiment of the device includes an array of isolated, sealed reservoir/tap units, each unit containing an integrated metering tap, each tap including: (a) a metering tube translatable between a fill position inside the reservoir and an expel

position outside the reservoir. The metering tube contains (1) a tube end closure in a lower portion of the tube, (2) a port above the tube end closure, and (3) a piston in an upper portion of the tube. The piston is movable between a down position that seals the port and an up position above the port; and (b) a nozzle containing a fluid output channel through which the tube extends when in the down position, the fluid output channel having an upper end in fluid communication with a compressed gas path, and a lower end terminating in a nozzle tip.

4. Claims 18, 23, 25, and 29-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Karg et al. US 6,706,538.

As applied above.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 2-3, 16, 18, 20-23, and 25-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coffman et al.

Coffman et al. disclose a method and device for transferring fluids to and from multiple well plates. As seen in figure 9 a multiwell plate 20 (cassette), which in this example comprises a 384-well plate, has a plurality of wells 23 (reservoirs) also arrayed in a regular rectangular pattern each of which has an opening 22 in an upper surface 24 of plate 20. In accordance with this invention, drip directors or outlets 26 (comprising apertures) also depend downwardly from a lower surface 28 of plate 20.

Each well of the 96-well plate 10 might hold 400 μ l of sample while the receiving well 23 in the 384-well plate 20 might only hold 120 μ l.

As an enhancement, the 384-well plate could be fitted with a flexible, puncturable membrane 52 (as seen in figure 11).

Furthermore a vacuum source maybe employed to aid in the transfer of the liquid.

The device can be employed for purifying a product or biological, biochemical, or chemical molecules of interest, such as a plasmid, can be provided wherein the kit comprises one to four 96-well filter plates for culture and subsequent clarification of lysed/potassium acetate precipitated product (such as a plasmid).

Coffman et al. does not specify the specific dimensions of the wells, the membrane material, or that the biological sample is a specific enzyme.

It would have been obvious to one of ordinary skill in the art at the time of the invention to recognize the device may be manufactured to various dimensions and shapes including that as claimed by applicant in order to sufficiently hold the minute volumes including nanoliters within the range as claimed. Furthermore various membrane materials are conventional known including foil which would have been an obvious choice to one of ordinary skill in the art. As to the specific enzyme it would have been obvious to one of ordinary skill in the art to further recognize that the device could be employed in various methods for processing a number of biological samples including those as specified by applicant.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is 571-272-1258. The examiner can normally be reached on M-F, 1st Fri. Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

 Brian R Gordon
Primary Examiner
Art Unit 1743

brg

BRIAN R. GORDON
PRIMARY EXAMINER